

Appl. No. 10/612,280
Amdt. dated March 16, 2005
Reply to Office Action of December 28, 2004

PATENT

Amendments to the Drawings:

The attached 3 replacement sheets of drawings replaces the original 3 sheets of informal drawings.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

In the Office Action mailed December 28, 2004, claims 11-25 were rejected under 35 U.S.C. §102(b) or, in the alternative, under 35 U.S.C. §103(a) over U.S. Patent No. 5,854,159 to *Kato*; claims 11-25 were also rejected under 35 U.S.C. §102(a or e), or in the alternative, under 35 U.S.C. §103(a) over Patent Application Publication No. 2003/0008765) to *Niwa* and U.S. Patent No. 6,680,268 to *Alford*. Finally, an objection was made to claim 14.

The amendment cancels claim 11, and adds independent claim 26, which recites steps in making the aluminum oxide particles. Support for claim 26 is found in paragraph [16] on pages 3-4 of the Specification. Dependent claims 12-24 are amended to depend from claim 26, and claim 25 is cancelled. In addition, new claim 27 is also supported by paragraph [16], and new claim 28 is supported on page 3, lines 23-24. No new matter is believed added by the amendment, and claims 12-24, and 26-28 are pending in the application. Reconsideration and withdrawal of the objection and rejections is respectfully requested in light of the amendment, and the remarks that follow.

A. The Objection to Claim 14 is Addressed

The objection to claim 14 is made moot by the amendment, which clarifies that the ceramic component is fashioned in the shape of “a resonator support used in a cell phone base station.” Accordingly, withdrawal of the objection is respectfully requested.

B. The Rejection of the Claims Under § 102 and §103 is Addressed

Claims 11-25 were rejected under 35 U.S.C. § 102(b), or in the alternative under § 103(a), over *Kato*. The claims were also rejected under 35 U.S.C. § 102(a or e), or in the alternative under § 103(a), over *Niwa* and *Alford*, each taken alone. These rejections are made moot by the amendment.

The amendment cancels claims 11 and adds new independent claim 26, which recites the following steps to make the aluminum oxide particles:

digesting bauxite in a solution of sodium hydroxide;
precipitating an aluminum hydroxide precipitate from the sodium hydroxide solution, and washing the precipitate; and
calcining the aluminum hydroxide precipitate to form the aluminum oxide particles.

It has been discovered that high purity aluminum oxide particles (*e.g.*, purity of about 99.8% or greater) may be made by this technique at significantly lower cost than conventional methods of making high purity aluminum oxide. These steps are neither described nor suggested by *Kato*, *Niwa*, or *Alford*, all of which make and/or use high purity alumina produced by conventional methods.

Kato describes manufacturing alumina sintered bodies by adding at least an acid compound to an aluminum oxide starting powder. This teaches away from the present invention where aluminum oxide particles are made by digesting bauxite in a strong base (*i.e.*, sodium hydroxide). *Niwa* is silent on how the high purity alumina powders are made that are used in the alumina sintered bodies described in the reference. *Alford* only notes that the alumina used was commercially available alumina. Col. 3, lines 35–37. Thus, claim 26 is allowable over all the references, as are claims 12–24 and 27–28, which depend from claim 26. For at least this reason, the rejections of the claims under § 102 and § 103 over *Kato*, *Niwa* and *Alford* are made moot by the amendment, and should be withdrawn.

Drawings

Applicants submit 3 replacement sheets of drawings which replace the originally filed informal drawings.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

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If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,



Eugene J. Bernard
Reg. No. 42,320

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 415-576-0300
Attachments
GB:bhr
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